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Remarks

Claims 1-13 are pending. Claim 1 is the only independent claim.

Reconsideration and reexamination of the application is respectfully requested.

The paragraph bridging pages 10 and 11 has been amended to explicitly describe the correspondence between like elements between the second embodiment of the original Fig. 2 and the first embodiment of Fig. 1, as would be easily understood by a person having ordinary skill in the art from the original disclosure, in manner which applicant believes allows to overcome the objection to the drawings under 37 CFR 1.84(p)(5) at point 1 of the DETAILED ACTION of the Office letter dated June 30, 2005 and to overcome the rejection of Claim 5 under 35 USC 112 at point 3 of the DETAILED ACTION of the Office letter dated June 30, 2005.

A clarifying amendment, supported by lines 6-7 of page 7 of the original specification, has been made to each of Claims 10 and 12-13, in a manner which is believed to allow to overcome the rejection of original Claims 10 and 12-13 under 35 USC 112 at point 3 of the DETAILED ACTION of the Office letter dated June 30, 2005.

Claims 1, 3, 9-10, and 12-13 have been amended for overcoming each of the informal claim objections raised at point 2 of the DETAILED ACTION of the Office letter dated June 30, 2005.

Claim 1 has also been amended for more clearly patentably defining applicant's originally disclosed invention, including *inter alia*, defining the dynamic aspect of applicant's invention occurring at each wipe of the wipers, as disclosed originally e.g. at line 27 of page 7 to line 10 of page 8 of applicant's original disclosure, and further defining the "means for applying each one of said correction times to said corresponding motor/gearmotor of each one of said at least one faster wiper which interrupt/reduce power of the corresponding motor/gearmotor and reduce the

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corresponding lead time error to as close as possible to zero", as disclosed originally at line 30 of page 6 to line 2 of page 7 and at lines 7-10 of page 8 of applicant's original disclosure.

Applicant's claimed combination of technical features as set forth in the newly amended independent claim 1 is not disclosed nor fairly suggested to a person having ordinary skill in the art by the prior art of record.

The primary reference **Welch (5,568,026)** discloses synchronizing two windshield wipers each powered by a dedicated electric motor (column 1, lines 5-7, and column 3, lines 56-57) controlled by a programmed controller (column 1, lines 62-64, and column 4, lines 32-34), including indication of blade location in a specific region for each blade (column 1, lines 64-66, and column 4, lines 5-7), determination of a leading blade from a time delay between the blades reaching the same point in their respective wiping pattern (column 2, lines 8-9, and column 6, lines 60-61), setting a sampling window duration T1 for determination if a synchronization action needs to be taken (column 6, lines 61-64), allowing the leading blade to coast by removing power to the leading blade motor if the delay of the lagging blade exceeds the stored time (column 2, lines 11-13, and column 7, lines 1-8), and restoring power to the leading blade motor when the lagging blade sufficiently catches up (column 2, lines 13-15, and column 7, lines 13-15) or initiating dynamic braking if the lagging blade is too far behind (column 2, lines 15-18, and column 7, lines 19-22). See also the **signal processing means** of claim 1 of Welch at lines 43-52 of column 7): **"signal processing means for providing the first and second motor drive signals; for receiving the first and second position signals; for providing a coast signal if the first blade has reached a first location before the second blade has reached a second location; for interrupting the first motor drive signal in response to the coast signal; for providing a dynamic braking signal if the second blade has not reached the first position after a selected elapsed time following the coast signal"**.

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Welch offers no disclosure of applicant's claimed combination of elements, as required by the newly amended independent claim 1, including *inter alia*:

"means for determining, at each wipe, the wiping time for each one of said wipers;

means for measuring, at each wipe, and in relation to the transit of said at least two wipers at the respective means for signaling transit and direction of transit, the lead time error of each one of the at least one wiper that is faster with respect to the slower wiper of said at least two wipers;

means for calculating, at each wipe, a correction time in order to reduce said lead error of each one of said at least one faster wiper such that each correction time is a function of said corresponding lead error;

means for identifying, at each wipe, said slower wiper;

means for applying, at each wipe, each one of said correction times to said corresponding motor/gearmotor of each one of said at least one faster wiper which interrupt/reduce power of the corresponding motor/gearmotor and reduce the corresponding lead time error to as close as possible to zero".

Welch furthermore offers no fair teaching or suggestion to a person having ordinary skill in the art of such claimed combination of elements.

Similar considerations apply to all of the other prior art references of record.

The secondary reference Braun *et al* (6,218,741) discloses automatic windshield wiper operation based upon detection of rain on the windshield.

The secondary reference Kühbauch (5,157,314) discloses a windshield wiping system including a single drive unit connected to a pair of wipers by a pendulum transmission, sensors for sensing the position of each of the wipers, a control device connected with the drive unit and sensors, and an actuating element which includes another electric motor and which is arranged in a connecting rod of the pendulum

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transmission and which is connected to the control device to change an effective length of the connecting rod in a working connection with the control device.

The secondary reference *Ishikawa et al* (4,742,280) discloses a car wiper control device including a control electronic circuit driving the wiper in forward or reverse direction and configured to minimize connection brushes adaptable for small spaces.

Applicant's invention including the combination of elements as set forth in the newly amended claim 1 advantageously provides a particularly effective synchronization of the wiper blades due to an efficient dynamic and precise synchronization at each pass of the wiper blades, which is also extremely adaptable to a variety of user requirements, which advantageous effects are deemed by applicant to be unexpected and surprising over the prior of record.

In view of the foregoing, applicant respectfully solicits allowance of pending claims 1-13.

Respectfully submitted,



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